

## REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested.

Reconsideration and allowance of the above-referenced application are respectfully requested. Claims 1, 3, 7, and 9-11 are amended, and claims 1-15 are pending in the application.

The indication of informalities is appreciated. The claims have been amended to eliminate any informalities.

The drawings have been amended to eliminate any informalities based on adding the element names as suggested by the Examiner. However, the reference to Figure 4 as deficient is traversed: the assertion that “the Figure does not have an overall elemental number but is called Method for Selecting an Address Size” is without foundation, improper as mischaracterizing Figure 4, and is unnecessary. In particular, the Examiner fails to provide any authority in the rules (37 CFR) or MPEP that suggests that Figure 4 should be amended to include a “title”, as suggested by the Examiner. In fact, the “Brief Description of the Drawings” adequately describes at page 4, lines 19-20 to provide a sufficient understanding of Figure 4.

In view of the foregoing, it is believed the drawings are in proper form.

Claims 1, 7 and 10-12 stand rejected under 35 USC 103 in view of US Patent No. 6,643,269 to Fan. This rejection is respectfully traversed.

Each of the independent claims specify that each of the network switches are configured to switch each of the data packets based on a corresponding switching tag that is added to *a start of the corresponding data packet*. In addition, the switching tag has a selected size based on a number of the detected network nodes (and network switches). The independent claims 1, 7, and 10 have been amended to more precisely define the claimed feature that the switching tag is added to the start of the corresponding data packet, and that the switching tag has the selected size.

Hence, the independent claims specify that each of the *network switches* are configured to switch each of the data packets based on the corresponding switching tag, having the selected size, that is *added to the start of the corresponding data packet*. Consequently, address tables

within the network switches can be reduced to a minimum size, without the necessity of violating existing network protocols due to any reconfiguring of each and every network node to recognize modified data packets; rather, the switches can implement the reduced-sized addressing using the switching tag prepended to the start of the corresponding data packet, the switching tag being removed from the data packet prior to processing by the destination network node.

These and other features are neither disclosed nor suggested in the prior art.

Fan neither discloses nor suggests the claimed feature of configuring the network switches to switch each of the data packets based on a corresponding switching tag added to a start of the corresponding data packet, as claimed. Rather, Fan teaches away from is claimed feature by explicitly specifying that "the long addresses in the packet header are *replaced* by the corresponding short addresses, and the address type (long or short) is identified in the header" (column 6, lines 49-52); hence, "the packet with the shortened header is then forwarded to the destination node within the virtual address using the short address" (col. 6, lines 55-57). Note that an "address type field" is added prior to each source and destination address to enable a receiving node to identify whether the address is a short address or long address (col. 6, lines 17-20).

Fan also emphasizes that the short addresses are used to reduce the number of bits transmitted within the virtual network for each packet (col. 7, lines 4-6); however, "if using a short address is not appropriate for any reason, the virtual network does not replace the long address with the short address" (col. 6, lines 61-63).

Hence, Fan contemplates violating existing Internet Protocol and Ethernet protocol address sizes by reducing the IP address fields and MAC address fields beyond their minimum size (col. 5, line 64 to col. 6, line 14). Fan also recognizes that such violation of existing address protocols may not be appropriate in some circumstances, and in those cases teaches that the long addresses should not be replaced with short addresses (col. 6, lines and 61-63).

Each of the independent claims, however, do *not* specify replacing existing address fields, but rather specify *adding the switching tag* (having the selected size based on the number of detected network nodes) *to start of the existing data packet*. Hence, the reduced-address

switching tag can be implemented among the network switches, while preserving existing network protocols simply by removal of the switching tag prior to sending the packet to a conventional network node, or configuring the network node to ignore the switching tag at the start of the data packet.

For these and other reasons, this §103 rejection should be withdrawn.

It is believed the dependent claims are allowable in view of the foregoing.

In view of the above, it is believed this application is in condition for allowance, and such a Notice is respectfully solicited.

To the extent necessary, Applicant petitions for an extension of time under 37 C.F.R. 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including any missing or insufficient fees under 37 C.F.R. 1.17(a), to Deposit Account No. 50-0687, under Order No. 95-512, and please credit any excess fees to such deposit account.

Respectfully submitted,

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**(November 26, 2005 = Saturday)**

### **AMENDMENTS TO THE DRAWINGS**

The attached two (2) sheets of drawings includes changes to Figs. 1-3. These sheets, which include Figs. 1-3, replace the previously-submitted sheets including Figs. 1-3.

Attachment: Replacement Sheet

Annotated Sheet Showing Changes

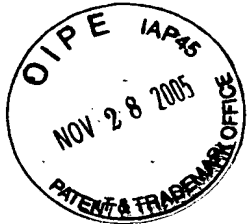
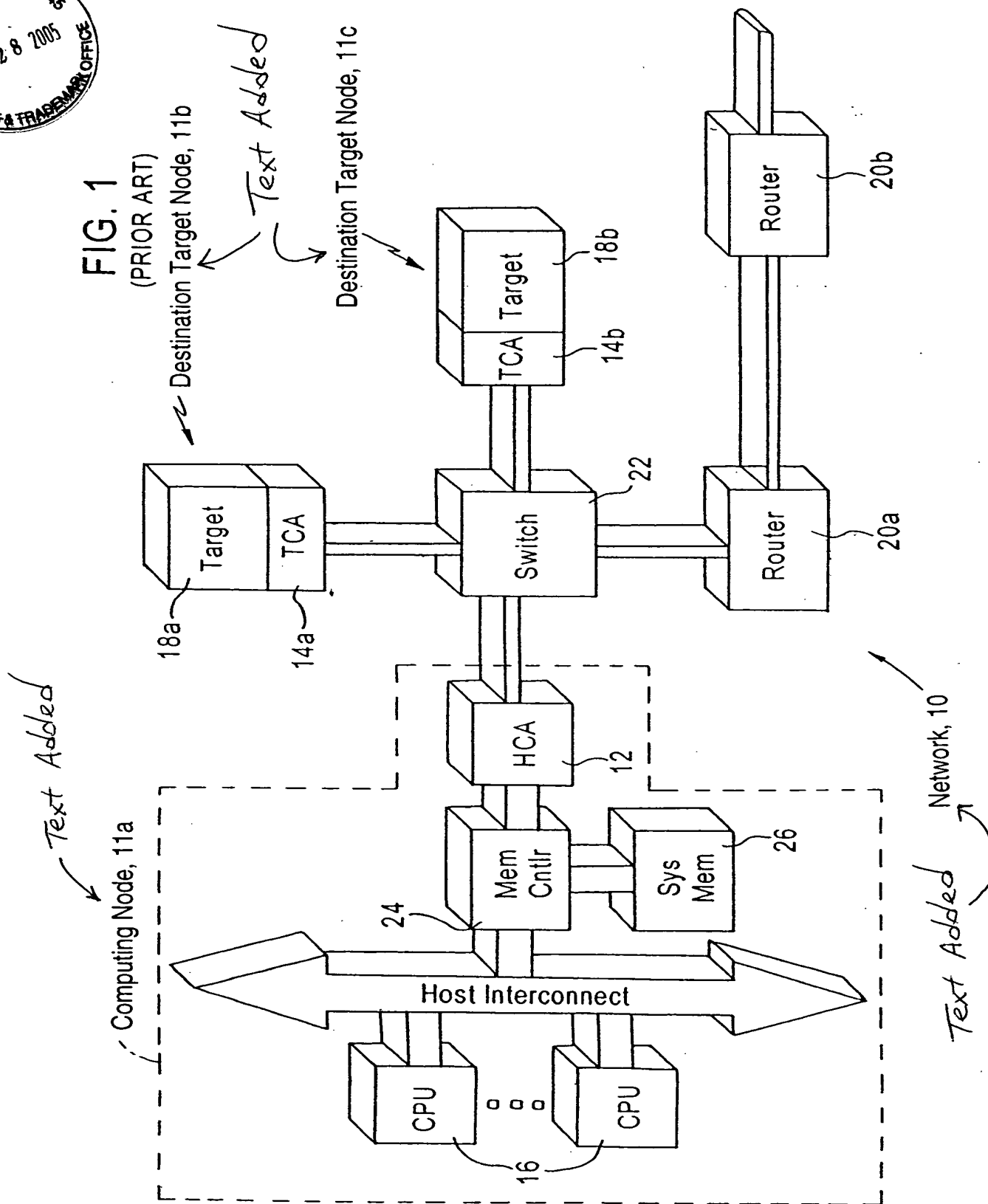


FIG. 1

(PRIOR ART)



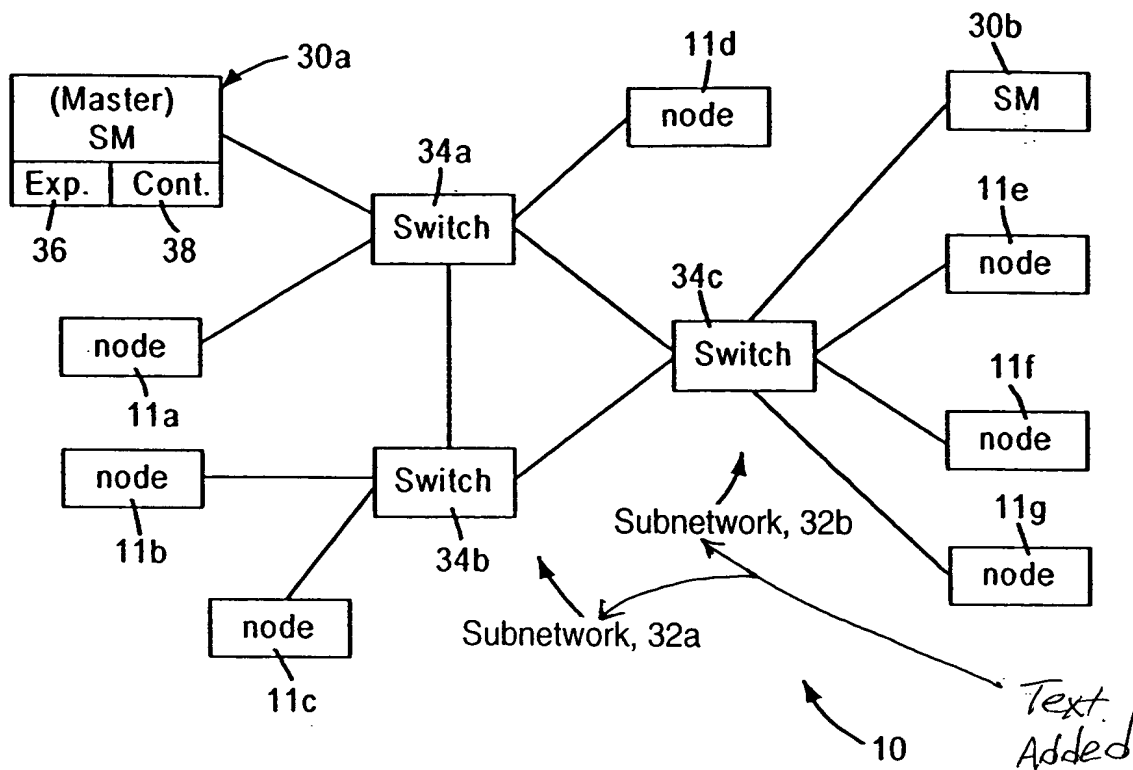
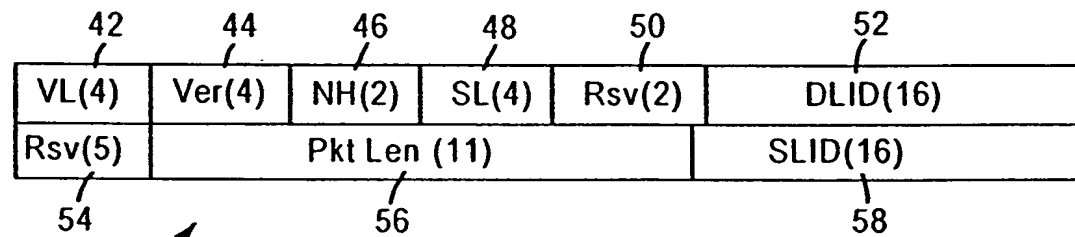


FIG. 2



Local Route Header, 40

FIG. 3A  
(PRIOR ART)

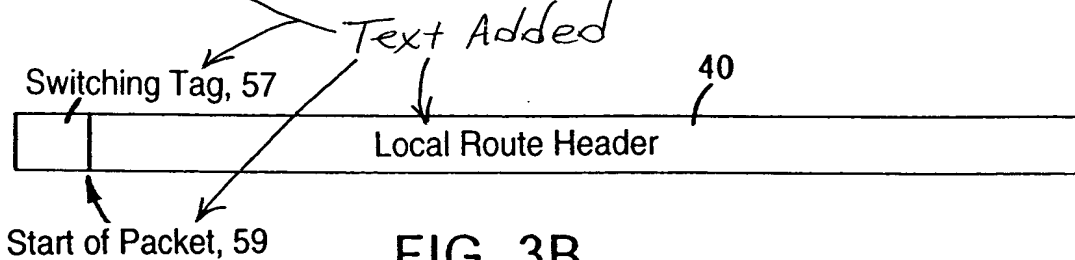


FIG. 3B